53. (Amended) A single chain class II MHC molecule comprising:

a peptide-binding groove and

covalently linked in sequence: 1) a class II  $\beta$  chain, 2) a single chain linker, and 3) a class II  $\alpha$  chain,

wherein the chain of 1) or 3) or both 1) and 3) lack a transmembrane domain and the chain of 1) or 3) or both 1) and 3) are truncated compared to its respective full length chain.

55. (Amended) The MHC molecule of claim 53, wherein the chain of 1) comprises a  $\beta$ 1 domain and the chain of 3) comprises an  $\alpha$ 1 domain.

66. (Amended) A single chain MHC class II-peptide complex comprising: a peptide-binding groove;

covalently linked in sequence: 1) a class II  $\beta$  chain, 2) a single chain linker, and 3) a class II  $\alpha$  chain, wherein the chain of 1) or 3) or both 1) and 3) lack a transmembrane domain and the chain of 1) or 3) or both 1) and 3) are truncated compared to its respective full length chain; and a presenting peptide being covalently linked to the MHC molecule.

- 67. (Amended) The MHC complex of claim 66, wherein the complex is soluble.
- 68. (Amended) The MHC complex of claim 66, wherein the chains of 1) and 3) comprise a  $\beta$ 1 domain and  $\alpha$  domain, respectively.
- 69. (Amended) The MHC complex of claim 66, wherein the MHC class II molecule comprises the presenting peptide covalently linked to the β chain.
- 71. (Amended) The MHC complex of claim 66, wherein a presenting peptide linker sequence is interposed between the presenting peptide and the MHC molecule.

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- 72. (Amended) The MHC complex of claim 66, wherein the  $\beta$  and  $\alpha$  chains are each independently selected from the group consisting of IE, IA, DR, DQ and DP proteins.
- 73. (Amended) The MHC complex of claim 66, wherein the MHC molecule is modified to carry a detectable tag.

Cont.

- 74. (Amended) A multivalent MHC complex comprising two or more linked MHC molecules of claim 66.
- 75. (Amended) The MHC complex of claim 74, wherein the MHC molecules are linked to immunoglobulin domains.
- 76. (Amended) The MHC complex of claim 74, wherein the MHC complex is modified to carry a detectable tag.